

By



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,653	12/19/2003	William H. Robertson JR.	CE12083JME	3837

7590

09/26/2005

Larry G. Brown
Motorola, Inc.
Law Department
8000 West Sunrise Boulevard
Fort Lauderdale, FL 33322

EXAMINER

PHUONG, DAI

ART UNIT

PAPER NUMBER

2685

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/741,653	ROBERTSON, WILLIAM H.	
	Examiner	Art Unit	
	Dai A. Phuong	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-29 is/are rejected.
- 7) ☐ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

By

DETAILED ACTION

Claim Objections

1. Claim 8 is objected to under 37 CFR 1.75(c) as being in improper form. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-13 and 19-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (Pub. No: 2004/0203501) in view of Gammon et al. (Pub. No: 2005/0014537).

Regarding claim 1, Johnson et al. disclose a latching mechanism for assembly of a housing of an electronic device, comprising: a latch element 154 and 163 (fig. 14, [0043]); and a receiving element 167 contained within the housing 180 (fig. 14, [0043]), wherein the receiving element comprises: a recess for engaging the latch element 167 (fig. 14, [0043] and [0044]). However, Johnson et al. do not disclose a latching mechanism for assembly of a housing of an electronic device, comprising: at least one audio port for providing an audio channel for the electronic device.

In the same field of endeavor, Gammon et al. disclose a latching mechanism for assembly of a housing of an electronic device, comprising: at least one audio port for providing an audio channel for the electronic device ([0061] and [0063] to [0065]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the handset of Johnson et al. by specifically including at least one audio port for providing an audio channel for the electronic device, as taught by Gammon et al., the motivation being in order to reduce the size for the device.

Regarding claim 2, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 1. Further, Johnson et al. disclose the latching mechanism further comprising: a gap formed between the latch element and the receiving element ([0043] to [0044]). Moreover, Gammon et al. disclose the latching mechanism further comprising: wherein the audio channel further comprises the gap ([0061] and [0063] to [0065]).

Regarding claim 3, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 1. Further, Johnson et al. disclose the latching mechanism wherein the latch element is rotatably coupled to the recess, and further wherein the latch element rotation includes a first orientation for disengaging the latch element from the housing and a second orientation for engaging the latch element within the housing ([0043] to [0044]).

Regarding claim 6, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 1. Further, Gammon et al. disclose the latching mechanism further comprising: a secondary latch element 425, wherein at least a portion of the housing is mechanically coupled between the latch element and the secondary latch element, wherein the

secondary latch element comprises at least one secondary latch element audio port aligned with the at least one audio port, and further wherein the audio channel further comprises the at least one secondary latch element audio port (fig. 4 and fig. 5, [0061] and [0063] to [0065]).

Regarding claim 7, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 6. Further, Gammon et al. disclose the latching mechanism wherein the electronic device further comprises: an audio element, wherein at least a portion of the secondary latch element is mechanically coupled between the audio element and at least a portion of the housing (fig. 4 and fig. 5, [0061] and [0063] to [0065]).

Regarding claim 8, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 7. Further, Gammon et al. disclose the latching mechanism wherein the audio element generates an audio output, and further wherein the audio output is transmitted through the audio channel (fig. 4 and fig. 5, [0045], [0061] and [0063] to [0065]).

Regarding claim 9, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 8. Further, Gammon et al. disclose the latching mechanism wherein the audio element receives an audio input through the audio channel (fig. 4 and fig. 5, [0045], [0061] and [0063] to [0065]).

Regarding claim 10, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 6. Further, Gammon et al. disclose the latching mechanism wherein the secondary latch element 425 comprises: an audio plate coupled between the latch element and at least a portion of the housing, wherein the audio plate includes at least one audio plate audio

port, wherein the at least one secondary latch element audio port comprises the at least one audio plate audio port (fig. 4 and fig. 5, [0061] and [0063] to [0065]).

Regarding claim 11, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 10. Further, Gammon et al. disclose the latching mechanism wherein the secondary latch element further comprises: a seal coupled between the audio element and at least a portion of the housing, wherein the seal includes at least one seal audio port aligned with the at least one audio plate audio port, and wherein the at least one secondary latch element audio port further comprises the at least one seal audio port (fig. 4 and fig. 5, [0061] and [0063] to [0065]).

Regarding claim 12, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 1. Further, Gammon et al. disclose the latching mechanism wherein the housing further comprises: a fixed housing portion; and a removable housing portion, wherein the receiving element is contained within the removable housing portion, and further wherein the removable housing portion is assembled to the fixed housing portion when the latch element is engaged within the housing (fig. 4, [0059] to [0065]).

Regarding claim 13, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 1. Further, Gammon et al. disclose the latching mechanism wherein the electronic device further comprises a keypad, and further wherein the keypad is assembled between the fixed housing portion and the removable housing portion and the removable housing portion when the latch element is engaged within the housing (fig. 4, [0059] to [0065]).

Regarding claim 19, Johnson et al. disclose a method of operating a latching mechanism, comprising the steps of: mechanically coupling a latch element to a housing ([0043]). However,

Art Unit: 2685

Johnson et al. do not disclose a method of operating a latching mechanism, comprising the steps of: creating an audio channel by engaging the latch element within the housing; and porting audio through the audio channel.

In the same field of endeavor, Gammon et al. disclose a method of operating a latching mechanism, comprising the steps of: creating an audio channel by engaging the latch element within the housing; and porting audio through the audio channel ([0061] and [0063] to [0065]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the handset of Johnson et al. by specifically including creating an audio channel by engaging the latch element within the housing; and porting audio through the audio channel, as taught by Gammon et al., the motivation being in order to reduce the size for the device.

Regarding claim 20, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 19. Further, Johnson et al. disclose the method of operating a latching mechanism wherein the mechanically coupling step includes forming a gap between the latch element and the housing ([0043]). Moreover, Gammon et al. disclose further wherein the audio channel created in the creating step comprises the gap ([0061] and [0063] to [0065]).

Regarding claim 21, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 19. Further, Johnson et al. disclose the method of operating a latching mechanism wherein engaging of the latch element within the housing comprises rotating the latch element to an orientation ([0043]).

Regarding claim 22, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 21. Further, Gammon et al. disclose the method of operating a latching mechanism wherein the housing comprises a fixed housing portion mechanically to a removable housing portion, the method further comprising the step of: assembling a keypad between the fixed housing portion and the removable housing portion in response to the engaging of the latch element within the housing ([0059] to [0061] and [0063] to [0065]).

Regarding claim 23, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 21. Further, Johnson et al. disclose the method of operating a latching mechanism further comprising the step of: disengaging the latch element from the housing by rotating the latch element to another orientation ([0043]).

Regarding claim 24, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 23. Further, Johnson et al. disclose the method of operating a latching mechanism wherein the housing comprises a fixed housing portion mechanically to a removable housing portion, the method further comprising the step of: disassembling the removable housing portion from the fixed housing portion in response to the disengaging step ([0043]).

Regarding claim 25, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 19. Further, Gammon et al. disclose the method of operating a latching mechanism further comprising the step of: mechanically coupling at least a portion of the housing between the latch element and at least a portion of a secondary latch element, wherein the creating of the audio channel step further comprises aligning an audio port of the housing

with a secondary latch element audio port of the secondary latch element ([0061] and [0063] to [0065]).

Regarding claim 26, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 25. Further, Johnson et al. disclose the method of operating a latching mechanism further comprising the step of: mechanically coupling an audio element to the secondary latch element ([0061] and [0063] to [0065]).

Regarding claim 27, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 26. Further, Gammon et al. disclose the method of operating a latching mechanism further comprising the steps of: generating an audio output by the audio element; and transmitting the audio output through the audio channel ([0059] to [0065]).

Regarding claim 28, the combination of Johnson et al. and Gammon et al. disclose all the limitations in claim 26. Further, Gammon et al. disclose the method of operating a latching mechanism further comprising the steps of: receiving an audio input; and transferring the audio input to the audio element through the audio channel ([0059] to [0065]).

4. Claims 14-18 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gammon et al. (Pub. No: 2005/0014537) in view of Charlier et al. (Pub. No: 2004/0203484).

Regarding claim 14, Gammon et al. disclose an electronic device, comprising: a housing (fig. 4, [0059] to [0061]), comprising: a fixed housing portion (fig. 4, [0059] to [0061]); a removable housing portion having at least one audio port (fig. 4, [0059] to [0061]); and an audio channel, wherein the audio channel is formed when the removable housing portion is assembled to the fixed housing portion (fig. 4, [0061] to [0065]).

However, Gammon et al. does not disclose an electronic device, comprising: a latching mechanism for assembling the removable housing portion to the fixed housing portion, wherein the latch mechanism comprises: a latch element rotatably coupled to the removable housing portion, wherein the latch element rotation includes an orientation for engaging the latch element to assemble the removable housing portion to the fixed housing portion.

In the same field of endeavor, Charlier et al. disclose an electronic device, comprising: a latching mechanism for assembling the removable housing portion to the fixed housing portion ([0016]), wherein the latch mechanism comprises: a latch element rotatably coupled to the removable housing portion, wherein the latch element rotation includes an orientation for engaging the latch element to assemble the removable housing portion to the fixed housing portion ([0020] to [0021]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile terminal of Gammon et al. by specifically including a latching mechanism for assembling the removable housing portion to the fixed housing portion, wherein the latch mechanism comprises: a latch element rotatably coupled to the removable housing portion, wherein the latch element rotation includes an orientation for engaging the latch element to assemble the removable housing portion to the fixed housing portion, as taught by Charlier et al., the motivation being in order to provide user interface protection.

Regarding claim 15, the combination of Gammon et al. and Charlier et al. disclose all the limitations in claim 14. Further, Charlier et al. disclose the electronic device wherein the latch

element rotation further includes another orientation for disengaging the latch element to disassemble the removable housing portion from the fixed housing portion ([0020] to [0021]).

Regarding claim 16, the combination of Gammon et al. and Charlier et al. disclose all the limitations in claim 14. Further, Charlier et al. disclose the electronic device wherein the removable housing portion includes a recess 20, wherein a gap is formed between the latch element and the recess when the removable housing portion is assembled to the fixed housing portion, and further wherein the audio channel comprises the gap ([0016]).

Regarding claim 17, the combination of Gammon et al. and Charlier et al. disclose all the limitations in claim 14. Further, Gammon et al. disclose the electronic device wherein the latching mechanism further comprises: a secondary latch element, wherein the housing is mechanically coupled between the latch element and at least a portion of the secondary latch element, wherein the secondary latch element comprises at least one secondary latch element audio port aligned with the at least one audio port, and further wherein the audio channel further comprises the at least one secondary latch element audio port (fig. 4, [0061] and [0063] to [0065]).

Regarding claim 18, the combination of Gammon et al. and Charlier et al. disclose all the limitations in claim 14. Further, Charlier et al. disclose the electronic device a keypad, wherein the keypad is assembled between the fixed housing portion and the removable housing portion ([0018] to [0019]).

Regarding claim 29, Gammon et al. disclose a method of operating a latching mechanism within an electronic device having a housing including a fixed housing portion and a removable

housing portion, the method comprising the steps of: forming an audio channel by aligning at least one audio port contained within the fixed housing with an audio port within the removable housing portion when the latch element is engaged ([0061] and [0062] to [0065]). However, Gammon et al. do not disclose assembling the removable housing portion to the fixed housing portion by: mechanically coupling a latch element to the removable housing portion; engaging the latch element within a recess of the fixed housing portion.

In the same field of endeavor, Charlier et al. disclose assembling the removable housing portion to the fixed housing portion by: mechanically coupling a latch element to the removable housing portion ([0016] and [0020] to [0021]); engaging the latch element within a recess of the fixed housing portion ([0016] and [0020] to [0021]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile terminal of Gammon et al. by specifically including disclose assembling the removable housing portion to the fixed housing portion by: mechanically coupling a latch element to the removable housing portion; engaging the latch element within a recess of the fixed housing portion, as taught by Charlier et al., the motivation being in order to provide user interface protection.

Reasons Subject Matter

5. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 8, the prior art record does not disclose nor fairly suggest the **latching mechanism wherein the latch element comprises a protrusion, wherein the recess further**

Art Unit: 2685

comprises a similarly-shaped opening, and further wherein the protrusion aligns with the similarly-shaped opening in the second orientation.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hampton et al. (Pub. No: 20040264688) acoustic seal system

Wong et al. (Pub. No: 20030086562) hand-free speaker phone

Sadler et al. (Pub. No: 20030083018) wireless communication device

Strawn et al. (Pub. No: 20010049292) radiotelephone

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

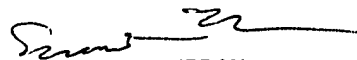
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong

AU: 2685

Date: 09-15-2005


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600